Nine-year learning outcomes: Intellectual and academic skills

Academic ability															e friends	ı
	Worksh	op mode	el .		Discuss	sion mod	el		Socializ	ing mode	el		in colleg	e model		
Predictors	٦	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	г	Step 1	Step 2	Step 3
Classroom	067	-			057				057				067			
Informal interaction (model)	103				.026				.136				106			
Writing													Same ra	ace: Clos	se friends	,
	Worksh	op mode	el		Discus	sion mod	el		Socializ	ing mod	el		in colleg	je model		
Predictors -	r	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.130	·	•	•	.120	·	•		.120			-	.130		•	
Informal interaction (model)	.118				.171	-		•	.107				083			
Listening ability													Same n	ace: Clos	se friends	3
	Workst	nop mode	el		Discus	sion mod	lel		Socializ	ing mod	el		in colleg	ge model		
Predictors	r	Step 1	Step 2	Step 3	<u> </u>	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	7	Step 1	Step 2	Step 3
Classroom	.025	•	•	•	.037	•	•	•"	.037		•	•	.025	•	•	•
Informal interaction (model)	.012				.105				031				053			

Nine-year learning outcomes: Valued skills

General knowledge	Worksh	op mode	ı		Discuss	sion mod	el		Socializ	ing mode	al .		Same ra		e friends	i
Predictors Classroom	r 043	Step 1		Step 3	r 052	Step 1	Step 2	Step 3	r 052	Step 1	Step 2	Step 3	r 043	Step 1	Step 2	Step 3
Informal interaction (model)	.028				027				.071				.143			=
Analytical and problem-solving	skills												Same ra	ce: Clos	e friends	3
	Workst	op mode	i		Discus	sion mod	el		Socializ	ing mode	el		in colleg	je model		
Predictors	r	Step 1	Step 2	Step 3	<u> </u>	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	138	•	•	•	133	•	•	•	133	•	•	•	138	•	•	•
Informal interaction (model)	.072				025				.029				.108			
Ability to think critically	•												Same ra	ace: Clos	e friends	5
•	Worksl	nop mode	H		Discus	sion mod	ei		Socializ	ing mode	el		in collec	je model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1		Step 3		Step 1		Step 3
Classroom	.107	•	•	•	.110	•	•	•	.110	•	•	•	.107	•	•	
Informal interaction (model)	007				.121				.089				042			
Writing skills													Same ra	ace: Clos	se friends	s
_	Worksl	nop mode	el .		Discus	sion mod	lel		Socializ	zing mod	el		in collec	je model		
Predictors	r	Step 1		Step 3	Г	Step 1	Step 2	Step 3	r	Step 1		Step 3	r	Step 1		Step 3
Classroom	009	•		•	020	•	•	•	020			,	009			
Informal interaction (model)	.067				.108			-	.031				002			
Foreign language skills															se friend:	S
	Works	hop mode	.		Discus	sion mod	<u>lel</u>		Socializ	zing mod			in colleg	je model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.132				.130				.130				.132		,	
Informal interaction (model)	.113				.044				075				.078			

Four-year democracy outcomes: Citizenship engagement

Influencing the political structure													Same ra	ice: Clos	e friends	;
	Worksh	op mode	1		Discuss	sion mod	el		Socializ	ing mode	el		in colleg	e model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.094		-		.082				.082			•	.094			
Informal interaction (model)	.208				.222				.030				.005			
Influencing social values													Same ra	ice: Clos	e friends	3
	Worksh	op mode	d		Discuss	sion mod	el		Socializ	ing mode	el		in colleg	e model		
Predictors		Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1		Step 3	r	Step 1		Step 3
Classroom	.114	•	•	·	.102	•	·	•	.102		•	•	.114	•	•	,
Informal interaction (model)	.140			-	.202				.043				.101			
Helping others in difficulty		•											Same ra	ce: Clos	e friends	\$
	Worksh	nop mode	el .		Discus	sion mod	el		Socializ	zing mod	el		in colleg	je model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	<u> </u>	Step 1	Step 2	Step 3
Classroom	.067	•	•	•	.084	•	•	•	.084	,	-	•	.067	•	•	•
Informal interaction (model)	.197			-	.183				006				.178		•	
Being involved in programs to cl	ean up th	e enviro	nment										Same ra	ace: Clos	se friends	3
	-	nop mode			Discus	sion mod	el		Socializ	zing mod	el		in colleg	je model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	ſ	Step 1	Step 2	Step 3
Classroom	.042	•	•		.040				.040				.042			
Informal interaction (model)	.007				093				.035				065			
Participating in a community acti	on progr	am											Same ra	ace: Clos	se friends	5
, ,		nop mode	el .		Discus	sion mod	lel		Socializ	zing mod	el		in colleg	je model		
Predictors		Step 1		Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3		Step 1		Step 3
Classroom	.156			•	.158	•	•	•	.158	•	•	•	.156	<u> </u>	•	•
Informal interaction (model)	.151				.262	•			118				.123			

Four-year democracy outcomes: Racial/cultural engagement

Promoting racial understanding													Same ra	ace: Clos	e friends	š
	Worksh	op mode	al .		Discuss	sion mod	el		Socializ	ing mode	H		in colleg	ge model		
Predictors	Г	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.253	ė	e i	•	.242	ė	·		.242	ė	•		.253	Ė	•	
Informal interaction (model)	.109				.430	•	•		.085				.164			
Cultural awareness and apprecia	ition												Same ra	ace: Clos	se friend:	s
	Worksh	op mode	H		Discus	sion mod	lel		Socializ	ing mode	el		in colleg	ge model		
Predictors	r	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.245		i i		.249			•	.249	i i	ė.	ė	.245		i i	i
Informal interaction (model)	.164				.342				.005				.251			
Acceptance of persons from diff	erent race	es/cultur	es										Same n	ace: Clos	se friend:	S
-		nop mode			Discus	sion mod	lel		Socializ	ing mode	el		in colleg	ge model	Í	
Predictors		Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	<u> </u>	Step 1	Step 2	Step 3
Classroom	022	•	•	•	025	•	•	•	025	•	•	•	022	•	•	•
informal interaction (model)	024				.013				.174				.029			

Nine-year democracy outcomes: Citizenship engagement

Hours/week spent in volunteer wa		nunity se			Discuss	sion mode	el .		Socializ	ing mode	ı		Same ra		e friends	
Predictors	7701131	Step 1		Sten 3	<u> </u>	Step 1		Sten 3	r		Step 2	Step 3	r		Step 2	Step 3
Classroom	.089	oteb i	Otep 2	Otep o	.091	Otep 1	Otep 2	Otep 5	.091	otep i	Otep 2	oreh o	.089	Step i	Step 2	Sieh 2
Informal interaction (model)	.042				.074				066				.098			
mornal interaction (model)	.042				.074				000				.090	,		
Number of community service act		-													e friends	
0 4-4	Worksh	op mode				sion mod				ing mode			in colleg			
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.114				.113				.113				.114			
Informal interaction (model)	.183		-		.107				.088				.160			
Community service reason: To gi	ve me a	chance t	o work v	with peop	le differer	nt from r	ne						Same ra	ace: Clos	e friends	
	Worksh	op mode	<u> </u>		Discuss	sion mod	el		Socializ	zing mode	<u> </u>		in colleg	e model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.001				014				014				.001		•	
Informal interaction (model)	.019				.002				126				.087			
Community service reason: To im	-	_		B									Same ra	ace: Clos	e friends	i
_	Worksh	nop mode			Discuss	sion mod	el		Socializ	zing mode	 		in colleg	je model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.088				.078				.078				.088			
Informal interaction (model)	.061				.104				099				.100		•	
Community service reason: To in															e friends	;
	Works	nop mode			Discus	sion mod				zing mod			in collec	je model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.094				.089				.089				.094			
Informal interaction (model)	.263			=	.153				.005				.270			•
Community service reason: To fu		social res		ility	Discus	sion mod	lel		Sociali	zing mod	el			ace: Clos ge model	se friends	.
Predictors	<u> </u>	Step 1		Step 3	r	Step 1		Step 3	Г	Step 1		Step 3	ſ		Step 2	Step 3
Classroom	.126	J.J.			.133				.133	•			.126			•
Informal interaction (model)	.186		•		.218				.057				010			
Influencing the political structure		h			Dienus	-l	lal		Coolali	zina mod	al				e friends	.
Dra diata —		hop mode		Class 2	DISCUS	sion mod		Cton 3		zing mod		Cton 3		ge model	Cton 2	Step 2
Predictors	• .	· Step 1	Step 2	Step 3	7	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.003				005				005				.003			
Informal interaction (model)	.022				.021				.099				078		•	

influencing social values	Worksh	op mode	ı		Discus	sion mod	el ·		Socializ	ing mode	d			ice: Clos le model	e friends	i
Predictors	r	Step 1	Step 2	Step 3	ſ	Step 1		Step 3	ſ	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.121	J.5p .			.116				.116				.121			
Informal interaction (model)	.017				.082				124				.077			
Helping others in difficulty													Same n	ace: Clos	e friends	.
•	Worksh	nop mode	4		Discus	sion mod	lei		Socializ	ing mode	k		in colleg	je model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1		Step 3
Classroom	.177	É	•	•	.199	ė	Ė	Ė	.199	ė	ė	Ė	.177			•
Informal interaction (model)	.181				.081				064				.229		•	
Being involved in programs to c	lean up th	e enviro	nment										Same n	ace: Clos	se friend:	3
	-	hop mode			Discus	sion mod	iel		Socializ	zing mode	el		in collec	je model		
Predictors		Step 1	Step 2	Step 3	1	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.120	ė	ė	•	.119	ė	•	•	.119		•	•	.120	ė	ė	•
Informal interaction (model)	.014				.045				.052				050			
Participating in a community ac	tion progr	am											Same r	ace: Clos	se friend:	· S
		hop mode	H		Discus	sion mod	tel et		Socializ	zing mode	ei	*	in colle	ge model	1	
Predictors	7	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1		Step 3
Classroom	.180				.190		•	•	.190	ė		•	.180		•	•
Informal interaction (model)	204		-		222				- 115				312			-

Nine-year democracy outcomes: Racial/Cultural engagement

Promoting racial understanding													Same ra	ace: Clos	se friends	š
	Worksh	nop mode	el		Discus	sion mod	iel		Socializ	ing mode	el		in colleg	je model		
Predictors :	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.143	-	•		.147				.147				.143	·		
Informal interaction (model)	.107				.184	•			.113				.146			
Cultural awareness and apprecia	ation					•							Same n	ace: Clos	se friend:	3
	Workst	nop mode	H		Discus	sion mod	lel		Socializ	ing mode	el '		in colleg	ge model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.235				.235		-		.235		-		.235			
Informal interaction (model)	.191			•	.193				076				.171			
Acceptance of persons from diff	erent race	es/cultur	es										Same r	ace: Clo	se friend:	S
	Workst	nop mode	ᅿ		Discus	sion mod	lel		Socializ	ing mod	el		in colle	ge mode	1	
Predictors	r	Step 1	Step 2	Step 3	٢	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	<u> </u>	Step 1	Step 2	Step 3
Classroom	.132	•	-	-	.136	•	-	•	.136		•		.132	•	•	•
Informal interaction (model)	.121	-			.105				.149				.011			

Nine-year outcomes: Living / working in a diverse society

How well did your undergraduate				or gradua			-1		Casialis				Close fr		. •	
Predictors		op mode		Cton 3		sion mod		Step 3		ng mode		Char O	were div			<u> </u>
Classroom	r .224	Step 1	Siep Z	Step 3	r .233	Step 1	Step 2	Step 3	.233	Step 1	Step 2	Step 3	.224	Step 1	Step 2	Step 3
Informal interaction (model)	.134	=	•	•	.138	•	•	-	.130	•	-		.051	•	•	•
low well did your undergraduate	educatio	n prepa	re vour	current/m	ost recen	t iob?							Close fr	ionde in	college	
		op mode	-			sion mod	el		Socializ	ing mode	el		were di			
Predictors	7 5	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	<u> </u>	Step 1		Step 3	ſ		Step 2	Step :
Classroom	.004	•	•	•	.011	•	•	•	.011	• •			.004			
Informal interaction (model)	.091				122		*	*	.132				003			
ast year: Discussed racial/ethnic	issues												Close fi	iends in	college	
		op mode	ł		Discuss	sion mod	el		Socializ	ing mode	H			erse mo	•	
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.172				.160		•	•	.160			•	.172	Ė	•	•
Informal interaction (model)	.122				.327			•	.063				262	٠	•	٠
ast year: Socialized with someon	ne of ano	ther rac	ial/ethni	ic group									Close fi	iends in	college	
	Worksh	op mode	ł		Discuss	sion mod	el		Socializ	ing mode	el [']		were di	erse mo	odel	
Predictors	Г	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	029	•	•	•	018	•	•	•	018	•		•	029	•	•	•
Informal interaction (model)	078				134				.242			•	.378			•
current close friends are diverse													Close fo	iends in	college	
	Worksh	op mode	H		Discuss	sion mod	lel		Socializ	ing mode	el		were di	verse mo	odel	
Predictors	7	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	ſ	Step 1	Step 2	Step 3
Classroom	.082	•	•	•	.085	•	•	•	.085	•	•	-	.082	•	•	•
Informal interaction (model)	.204				.124				218	*	*	•	.733		•	
Current neighbors are diverse													Close f	riends in	college	
	Worksh	nop mode	H		Discus	sion mod			Socializ	ing mode	el		were di	verse mo		
Predictors	ſ	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	008	•	•	•	016	•	-	-	016			•	008	-	-	
Informal interaction (model)	.144				061				172				.247			
Gurrent work associates are dive	rse													riends in		
	Workst	nop mode	al .		Discus	sion mod			Socializ	ing mode			were di	verse mo		
Predictors	ſ	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step :
Classroom	099	•	. •		098	•	-	•	098		*		099	*	*	
Informal interaction (model)	047				049				112				.193			

Table D3

Detailed regression summary tables: CIRP data base, Latino students

					_	ant positi ant negat			• *							
Outcome variable																
Four-year learning outcomes: En	ngagemen	t and m	otivation													
Graduate degree aspirations					51				0 ! - !'-	•					se friends	S
Predictors		op mode	Step 2	Stop 3	Discus	sion mod Step 1		Step 3	Socializ	ing mode	Step 2	Stop 2		e model		Cton 3
Classroom	r .151	Step 1	Step 2	Step 3	.139	Step 1	Step 2	Steb 3	.139	Step 1	Step 2	Step 3	r .148	Step 1	Ştep 2	Step 3
Informal interaction (model)	.030				.157	-	_	_	.155				.072			
informal litter action (moder)	.030				.137		-	_	.133				.072			
Drive to achieve		·											Same r	ace: Clos	se friends	s
	Worksh	nop mode	ł		Discus	sion mod	el		Socializ	ing mode	el			ge model		-
Predictors	7	Step 1		Step 3	7	Step 1	Step 2	Step 3	r		Step 2	Step 3			Step 2	Step 3
Classroom	.142	•	•	•	.151	•	•	Ė	.151	•	•		.141			
Informal interaction (model)	.206		•	-	.065				.038				.090			
Self-confidence (Intellectual)													Same r	ace: Clos	se friends	2
·	Worksh	nop mode	4		Discus	sion mod	el		Socializ	ing mod	el			ge model		•
Predictors	<u> </u>		Step 2	Sten 3	r		Step 2	Step 3	r		Step 2	Step 3	<u> </u>		Step 2	Sten 3
Classroom	.090	отор .		J	.088		J.J	J.5p J	.088	отър .	, -	J.13p J	.092	о.ор .	0. - p	J.5p J
Informal interaction (model)	.059				055				.006				.079			
Write original works (poems, nov	els shor	t stories	. etc.)										Same r	ace: Clos	se friends	S
the stagman works (position in the	•	nop mode			Discus	sion mod	el		Socializ	ing mode	el			ge model		•
Predictors	7			Step 3	r		Step 2	Step 3	r			Step 3	<u></u>		Step 2	Step 3
Ciassroom	.024	- C.O.P. 1		- 1-p -	.015	-1		J	.015				.017	- I-P 1		
Informal interaction (model)	.100				037				.074				060			
Create artistic works (painting, s	culpture.	decorati	ina. etc.)	,									Same r	ace: Clos	se friends	S
(Family)		nop mode	-	,	Discus	sion mod	iel		Socializ	ing mod	el		in colle	ge model		
Predictors	r	Step 1		Step 3	ſ		Step 2	Step 3	r			Step 3	<u> </u>		Step 2	Step 3
Classroom	003				013				013	•	•	•	010			•
Informal Interaction (model)	.200				.002				014				120			
Preparation for graduate/profess	ional sch	iooi											Same r	ace: Clos	se friends	s
		nop mode	H		Discus	sion mod	lel		Socializ	ing mod	el		in colle	ge model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.137	•		ė	.136	•	•	Ė	.136	•	-	Ė	.136	•	•	•
Informal interaction (model)	123		•	٠	.011				.053				.076			

Four-year learning outcomes: Intellectual and academic skills

Average undergraduate grade po		ge (self-l op mode	-	1)	Discuss	ion mode	el		Socializ	ing mode	el .		Same ra	ice: Clos e model	e friends	i
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r.	Step 1	Step 2	Step 3	ſ	Step 1	Step 2	Step 3
Classroom	.109				.117				.117				.109			
Informal interaction (model)	.063				056				.007				.156			
General knowledge													Same ra	ace: Clos	e friends	3
	Worksh	op mode			Discuss	sion mod	el		Socializ	ting mode			in colleg	e model		
Predictors	r	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	ı	Step 1	Step 2	Step 3
Classroom	.106				.114				.114				.114			
Informal interaction (model)	.133				.059				.070				034		•	
Academic ability													Same ra	ace: Clos	e friends	3
	Worksh	op mode	H		Discus	sion mod	el		Socializ	ing mod	el		in colleg	e model		
Predictors	7	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3
Classroom	.132				.140		-		.1,40				.130			
Informal interaction (model)	.107				.046				.022				.068			
Writing													Same ra	ace: Clos	e friend:	5
	Workst	nop mode	el el		Discus	sion mod	el		Socialit	zing mod	el		in colleg	e model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.057				.065				.065				.060			
Informal interaction (model)	.151		•		156				.100				.027			
Listening ability													Same ra	ace: Clos	se friend:	5
	Worksl	hop mode	el		Discus	sion mod	lel		Sociali	zing mod	el		in colleg	ge model		
Predictors	1	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	- r	Step 1	Step 2	Step 3
Classroom	.008	•	•	•	.027	•	·		.027				.020			,
Informal interaction (model)	.002				.045			•	.171	•	•	•	.063			
Analytical and problem-solving	skills												Same n	ace: Clos	se friend	s
•	Works	hop mode	el		Discus	sion mod	lel		Sociali	zing mod	el		in collec	ge model		
Predictors	Г	Step 1	Step 2	Step 3	ſ	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.077	•	•	•	.068	•	•	•	.068		-		.072	•	•	*
Informal interaction (model)	.063				.042				.024				.003			

Ability to think critically		,													se friends	•
	Worksh	op mode	1		Discuss	sion mod	el		Socializ	ing mode	<u> </u>		in colleg	ge model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	Γ	Step 1	Step 2	Step 3	ſ	Step 1	Step 2	Step 3
Classroom	.134	•	•	•	.133				.133				.128			
Informal interaction (model)	.117				.143				.071				.076			
Writing skills													Same n	ace: Clos	se friends	5
	Worksh	op mode	el		Discus	sion mod	ei		Socializ	ring mode	el		in colleg	ge model	i	
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.117	•		•	.128	-	•	•	.128	•		•	.129	•	•	•
Informal interaction (model)	.022				.090				.018				.024			
Foreign language skills					-								Same n	ace: Clos	se friends	5
	Worksl	nop mode	el		Discus	sion mod	lel		Socializ	zing mode	el		in colle	ge model	ł	
Predictors	r	Step 1	Step 2	Step 3	ī	Step 1	Step 2	Step 3		Step 1		Step 3	ſ	Step 1	Step 2	Step 3
Classroom	.232	ė	Ė		.248		Ė	-	.248	Ė		ė	.243		•	
Informal interaction (model)	178	-			050				024				068			

Nine-year learning outcomes: Engagement and motivation

Drive to achieve													Same ra	ice: Clos	e friends	;
	Worksh	op mode	1		Discuss	sion mode	el		Socializ	ing mode	el		in colleg	e model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.187	•	-	-	.202				.202				.197			
Informal interaction (model)	.148				.168				.015				003			
Self-confidence (Intellectual)													Same ra	ace: Clos	e friends	;
	Worksh	op mode	4		Discus	sion mod	el		Socializ	zing mode	el		in colleg	e model		
Predictors		Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1		Step 3	7	Step 1	Step 2	Step 3
Classroom	.030	•	-	•	.048	•	•	•	.048	•	•	•	.045	•		•.
informal interaction (model)	.036				.071				033				.045			
Write original works (poems, nov	els, shor	t stories	, etc.)										Same n	ace: Clos	e friends	3
•		nop mode			Discus	sion mod	el		Socializ	zing mod	el		in collec	e model		
Predictors	7	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	ſ	Step 1	Step 2	Step 3		Step 1	Step 2	Step 3
Classroom	.150	Ė	•	•	.134	•	•	•	.134	•	•	•	.142	ė	ė	Ė
Informal interaction (model)	.127	•			.042				.048				110		*	*
Create artistic works (painting, s	culpture,	decorati	ng, etc.)			•						Same ra	ace: Clos	se friends	5
		nop mode		*	Discus	sion mod	el		Socializ	zing mod	el		in collec	je model		
Predictors	7	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1		Step 3	r	Step 1	Step 2	Step 3
Classroom	045	•	•	•	056	•	•	•	056	•	•	•	053	•	•	•

Nine-year learning outcomes: Intellectual and academic skills

Academic ability													Same ra	ace: Clos	e friends	;
•	Worksh	op mode	i		Discuss	sion mod	el		Socializ	ing mode	H		in colleg	e model		
Predictors		Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.056	•	•	·	.049				.049			•	.053			
Informal interaction (model)	.020				.137				.094				065			
Writing													Same ra	ace: Clos	se friends	•
	Worksh	op mode	4		Discus	sion mod	el		Socializ	ing mode	el		in colleg	je model		
Predictors	r	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3
Classroom	056	•	•	·	061	•	•	·	061	•		•	054	•	•	•
Informal interaction (model)	.050				.121	•	-	•	.082				.017			
Listening ability													Same n	ace: Clos	se friends	3
	Worksh	nop mode	d		Discus	sion mod	el		Socializ	ing mod	el		in colleg	je model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.173	ė	Ė	•	.173		Ė	•	.173	Ė	•	•	.171	i i	, i	•
Informal interaction (model)	.060				.093				.195		-		.004			

Nine-year learning outcomes: Valued skills

General knowledge											_				e friends	,
	Worksh	op mode			Discus	sion mod			Socializ	ing mode			in colleg			
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	ŗ	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.135				.126				.126				.125			
Informal interaction (model)	.104				.025				.042				027			
Analytical and problem-solving	skills												Same ra	ace: Clos	se friends	3
	Workst	op mode	H		Discus	sion mod	el		Socializ	ing mode	el		in colleg	je model		
Predictors	r	Step 1	Step 2	Step 3	ſ	Step 1	Step 2	Step 3	Г	Step 1		Step 3		Step 1		Step 3
Classroom	.012	•	•	•	.020	•	•	•	.020	•	•	•	.008	•		•
Informal interaction (model)	.020				.052				068				.054			
Ability to think critically													Same ra	ace: Clos	se friends	5
-	Worksh	nop mode	Ħ		Discus	sion mod	lel		Socializ	ing mode	ei		in colleg	ge model		
Predictors	٢	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	ſ	Step 1		Step 3
Classroom	.006	•	•	·	026	•	•	•	026	-	•	•	017	•	•	•
Informal interaction (model)	070				031				026				.039			
Writing skills													Same n	ace: Clos	se friend:	S
	Workst	nop mode	H		Discus	sion mod	iel		Socializ	zing mod	el		in colleg	ge model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3
Classroom	.139				.134				.134				.136			
Informal interaction (model)	.218		•		.065				011				.110			
Foreign language skills													Same n	ace: Clos	se friend:	\$
-	Worksl	nop mode	el		Discus	sion mod	iel		Socializ	zing mod	el		in colle	ge mode		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1		Step 3	r	Step 1	Step 2	Step 3
Classroom	.333	Ė	ė		.331	Ė		•	.331				.334	Ė		•
Informal interaction (model)	.213				.105				072				.174			,

Four-year democracy outcomes: Citizenship engagement

Influencing the political structure	•												Same ra	ace: Clos	e friends	.
	Worksh	op mode	l		Discuss	sion mod	el		Socializ	ing mode	el		in colleg	je model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.153	ė	•		.153				.153			•	.152	Ė		·
Informal interaction (model)	.171				.259			=	.075				.032			
Influencing social values													Same ra	ace: Clos	e friends	5
	Worksh	op mode	ı		Discuss	sion mod	lel		Socializ	ing mode	al		in colleg	e model		
Predictors		Step 1	Step 2	Step 3	-	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1		Step 3
Classroom	.072	•	•	· ·	.051	•	•	·	.051	•	•	•	.065	•	•	•
Informal interaction (model)	.123				.099				004				049			
Helping others in difficulty													Same ra	ace: Clos	se friends	6
•	Workst	nop mode	4		Discus	sion mod	lel		Socializ	zing mode	el		in collec	e model		
Predictors		Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3		Step 1	Step 2	Step 3
Classroom	.198		•	•	.198	Ė	•	Ė	.198				.196		ė	ė
Informal Interaction (model)	.171				.149				.066				.023			
Being involved in programs to cl	ean up th	e enviro	nment										Same ra	ace: Clos	se friends	5
		nop mode			Discus	sion mod	lel		Socializ	zing mode	el		in colleg	je model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	<u> </u>	Step 1		Step 3
Classroom	.215	•	•	•	.212	•	•	•	.212	•	•	•	.209	•	•	•
Informal interaction (model)	.199				.100				.072				.037			
Participating in a community acti	ion progr	am											Same n	ace: Clos	se friend:	5
		nop mode	el .		Discus	sion mod	iel		Sociali	zing mode	el		in collec	ge model		
Predictors		Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	Г	Step 1		Step 3		Step 1	Step 2	Step 3
Classroom	.233		•	•	.228	ė	•	•	.228		•	•	.238	•	i	•
Informal interaction (model)	.290				.309	•		•	.198	=	-		061			

Four-year democracy outcomes: Racial/cultural engagement

Promoting racial understanding													Same ra	ce: Clos	e friends	
_	Worksh	op mode	l		Discuss	sion mod	el		Socializ	ing mode	H		in colleg	e model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.362				.356				.356				.362			
Informal interaction (model)	.267				.477	•		•	.316		=		001			
Cultural awareness and apprecia	tion												Same ra	ace: Clos	e friends	i
•	Worksh	op mode	4		Discus	sion mod	el		Socializ	ing mode	爿		in colleg	je model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	٢	Step 1	Step 2	Step 3
Classroom	.228	Ė	•	•	.202		•	•	.202			-	.210	•	ė	•
Informal interaction (model)	.257				.307			•	.133				.056			
Acceptance of persons from diff	erent race	s/cultur	es										Same ra	ace: Clos	e friends	i
•		op mode			Discus	sion mod	lel		Socializ	ing mode	el		in colleg	je model		
Predictors		Step 1	Step 2	Step 3	<u> </u>	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3
Classroom	.113	•	•	•	.095	•	•	•	.095		•	•	.101	•		•
Informal interaction (model)	.132				.225	•	•		.129				.117			

Nine-year democracy outcomes: Citizenship engagement

Hours/week spent in volunteer w	ork/comm	unity se	rvice												e friends	
	Worksh	op mode			Discuss	sion mode	el		Socializ	ing mode			in colleg	e model		
Predictors ·	Г	Step 1	Step 2	Step 3	ī	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.167				.154				.154				.159			
Informal Interaction (model)	.134				.234	•		•	.099				.108			
Number of community service ac	tivities p	articipate	ed in										Same ra	ace: Clos	e friends	;
-		op mode			Discus	sion mod	el		Socializ	ing mode	el		in colleg	e model		
Predictors		Step 1	Step 2	Step 3	7	Step 1	Step 2	Step 3	7	Step 1	Step 2	Step 3	<u> </u>	Step 1	Step 2	Step 3
Classroom	.140	Ė	•	•	.126	•	•	•	.126	•	•	•	.133			
Informal interaction (model)	.038				.071				.145				.154			
Community service reason: To g	ive me a	chance t	o work	with peop	le differe	nt from r	ne						Same ra	ace: Clos	e friends	3
	Workst	op mode	H		Discus	sion mod	el		Socializ	ing mode	ei		in colleg	ge model		
Predictors	r	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	018	•			007				007				018	•	•	
Informal interaction (model)	.118				030				.019	•			.083			
Community service reason: To it	mprove s	ociety as	a whole	e									Same ra	ace: Clos	e friends	,
•	•	op mode			Discus	sion mod	lel		Socializ	ing mode	el		in collec	je model		
Predictors	T		Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1		Step 3			Step 2	Step 3
Classroom	.031	J.J.			.022	J. 10 .	J		.022	- -		·	.016	, .	- 4c.c	.
Informal interaction (model)	.229			•	.109				.001				020			
Community service reason: To i	morove ir	v comm	unity										Same n	ace: Clos	se friends	.
,	•	nop mode	-		Discus	sion mod	lel		Socializ	zing mod	el		in collec	ge model		
Predictors	r	Step 1		Step 3	r			Step 3	r		Step 2	Step 3	<u> oc,</u>	Step 1	Step 2	Step 3
Classroom	.016	· Ouch .	Otop 2	O.Op O	.028	J.J.	J. J. L	J.Jp J	.028		p =	-1.5p •	.023	J.J.	VF -	
Informal interaction (model)	.107				.008				.077			•	.220			•
Community service reason: To f	hifili mv s	ocial res	sponsibi	ility									Same n	ace: Clos	se friends	5
,	-	nop mode	•		Discus	sion mod	lei		Socializ	zing mod	el		in collec	ge model		
Predictors .	77.51			Step 3	r			Step 3	r	Step 1	Step 2	Step 3		Step 1		Step 3
Classroom	.101	Ciop i	J.J.	J.Jp J	.114				.114				.115		•	
Informal interaction (model)	.038				.100				.110				.068			
Influencing the political structur	·e												Same r	ace: Clos	se friends	3
inizationing the political structur		hop mode	ᆈ		Discus	sion mod	iel		Sociali	zing mod	el			ge model		,
Predictors	r			Step 3	r	Step 1		Step 3	r		Step 2	Step 3	<u> vv,</u>	Step 1		Step 3
Classroom	.066	Oteh I	Step 2	Step 5	.073	Otep I	Olep 2	J.Cp J	.073	p .		2F 0	.080			
					.200	_	_	-	.022				.091			
Informal interaction (model)	.047				.200	-	-	-	.022				.031			

influencing social values			_								•			ce: Clos	e friends	į.
	Worksh	op mode			Discus	sion mod			Socializ	ing mode			in colleg	e model		
Predictors	7	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.056				.053				.053				.061			
Informal interaction (model)	024				.012				025				081			
Helping others in difficulty													Same ra	ace: Clos	e friends	,
•	Workst	nop mode	4		Discus	sion mod	el		Socializ	ing mode	el		in colleg	e model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	7	Step 1	Step 2	Step 3		Step 1	Step 2	Step 3
Classroom	.142	•	•	,	.134	•	-		.134	•	•	ė	.141	•	•	•
Informal interaction (model)	.097				018				153				.190			
Being involved in programs to c	lean up th	e enviro	nment										Same n	ace: Clos	se friend:	3
	Workst	hop mode	4		Discus	sion mod	el		Socializ	ing mod	el		in collec	ge model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	7	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.094	•	-	•	.085	•	•	•	.085	•	•	•	.089	•	•	•
Informal interaction (model)	.272	•	•		064				150				.136			
Participating in a community ac	tion progr	am					•						Same n	ace: Clos	e friend:	3
	Workst	hop mode	H		Discus	sion mod	lel		Socializ	ing mod	el		in colleg	ge model		
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	ſ	Step 1	Step 2	Step 3		Step 1	Step 2	Step 3
Classroom	.219	ė	•		.205	•	•		.205	•	•	Ė	.214		•	
Informal interaction (model)	.143				.143				.135	•			.103			

Nine-year democracy outcomes: Racial/Cultural engagement

Promoting racial understanding													Same ra	ice: Clos	e friends	i
	Worksh	op mode	4		Discus	sion mod	lel		Socializ	ing mode	el		in colleg	e model		
Predictors	r	Step 1	Step 2	Step 3	ſ	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.228	Ė	Ë	•	.213		·	•	.213				.217	-		-
Informal interaction (model)	.214				.286	•	•	•	.057				.106			
Cultural awareness and apprecia	ition												Same ra	ace: Clos	e friends	i
•						sion mod	lel		Socializ	ing mode	el		in colleg	e model		
Predictors	r	Step 1	Step 2	Step 3	ſ	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	<u> </u>	Step 1	Step 2	Step 3
Classroom	.278		ė		.278	ė			.278		ė	Ė	.285		ė	ė
Informal interaction (model)	.194	•			.152		,		014				003			
Acceptance of persons from diff	erent race	s/cultur	es					•					Same ra	ace: Clos	se friend:	3
•		nop mode			Discus	sion mod	iel		Socializ	ing mod	el		in colleg	je model		
Predictors	r	Step 1	Step 2	Step 3	f	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	<u> </u>	Step 1	Step 2	Step 3
Classroom	.218			•	.218	ė	Ė	e e	.218	Ė			.224			
Informal interaction (model)	242				.239				.047				- 085			

Nine-year outcomes: Living / working in a diverse society

How well did your undergraduate			-	or gradua			. •		0 1 - 11-					iends in	-	
Predictors	Worksh	op mode Step 1	Step 2	Step 3	Discuss	ion mode Step 1	Step 2	Step 3		ing mode Step 1		Ston 2	were div			04 2
Classroom	r .256	Steh I	Step 2	Steb 3	.262	Sieb i	Siep Z	Step 3	r .262	Step I	Step 2	Step 3	r .265	Step 1	Step 2	Step 3
Informal interaction (model)	011	_		-	.079	•	-	-	.089	•	•	-	.205 056	•	•	•
How well did your undergraduate				current/m									Close fr	iends in	college	
	Worksh	op mode			Discuss	ion mod			Socializ	ing mode	<u> </u>		were div	erse mo	del	
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	.156				.154				.154				.159		-	
Informal interaction (model)	.118				.002				.020				.002			
Past year: Discussed racial/ethnic	issues												Close fr	iends in	coilege	
	Worksh	op mode	t		Discuss	ion mod			Socializ	ing mode	Ä		were div	erse mo	del	
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	Г	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom .	.240				.233				.233		Ė	•	.229	ė	ė	•
Informal interaction (model)	.041				.408			•	.232				079	*	•	•
Past year: Socialized with someor	ne of ano	ther rac	ial/ethni	c group									Close fr	iends in	college	
	Worksh	op mode	1		Discuss	sion mod	el		Socializ	ing mode	el		were div	erse mo	del	
Predictors	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3			Step 2	Step 3
Classroom	.138	•			.135	•	•	•	.135	•	•		.142			
Informal interaction (model)	176	.	٠	٠	.142				.373			•	.035			
Current close friends are diverse													Close fr	riends in	college	
	Worksh	op mode	1		Discus	sion mod	el		Socializ	ing mode	el			verse mo	•	
Predictors	-	Step 1	Step 2	Step 3	ſ	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1		Step 3
Classroom	.139				.134				.134			=======================================	.133	=		
Informal interaction (model)	.217				056				200		•		.723	•	•	
Current neighbors are diverse							•						Close fi	riends in	college	·
_	Workst	op mode	d·		Discus	sion mod	lei	•	Socializ	zing mode	el		were di	verse mo	odel	
Predictors		Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1		Step 3	r	Step 1		Step 3
Classroom	073			•	077		•	•	-,077	•	•	•	081	•	•	•
Informal interaction (model)	.025				189				173			•	.436			
Current work associates are diver	rse												Close fi	riends in	college	
		op mode	el		Discus	sion mod	el		Socializ	zing mode	el		were di	verse mo	odel	
Predictors	r		Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3	r	Step 1	Step 2	Step 3
Classroom	022				025	•			025	•	• -	•	023	•	•	•
Informal interaction (model)	.064				074				224	٠	٠	•	.377			-

Table D4
Detailed regression summary tables: MSS data base, White students

				at positive effects: E at negative effects: 4	•			
Outcome variable								
Learning outcomes: Active t	hinking							
Complex thinking								
			Amount of	Amount of				Number of
	Personal	Negative	Interaction with	interaction with	Diversity of 6	Participation with	Dialogue	multicultural events
	Interactions model	Interactions model	students of color model	African Americans model	best friends model	other groups model	groups model	attended model
	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2
Classroom diversity	.281 🖷 🖷	.281	.276	.276 = =	.276	.280	.277	.273
Informal interaction (model)	.193 🖩 🛎	076	.024	.003	.030	.118	162 ◆	.207
Social historical thinking								
occial installed thirtiking			Amount of	Amount of				Number of
	Personal	Negative	Interaction with	interaction with	Diversity of 6	Participation with	Dialogue	multicultural events
	interactions model	Interactions model	students of color model	African Americans model	best friends model	other groups model	groups model	attended model
	/ Step 1 Step 2	f Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	f Step 1 Step 2	r Step 1 Step 2
Classroom diversity	.331	.331	.334	.334 # #	.334	.341 ■ ■	.334	.332
Informal Interaction (model)	.220	.018	.064	011	.055	.150	183 ♦ ♦	.306
Learning outcomes: Engage	ment and motivation							
Intellectual engagement								
			Amount of	Amount of				Number of
	Personal	Negative	interaction with	Interaction with	Diversity of 6	Participation with	Dialogue	multicultural events
	interactions model	interactions model	students of color model	African Americans model	best friends model	other groups model	groups model	attended model
	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2
Classroom diversity	.090 🗰 📾	.088 🗰 🖷	.092	.092 = =	.092 🗷 🖼	.088 🗰 880,	.091 🗰 🖷	.092
Informal Interaction (model)	.005	055	.014	022	004	.077 🗷 🗖	.028	.086
Graduate school intentions								
			Amount of	Amount of				Number of
	Personal	Negative	interaction with	Interaction with	Diversity of 6	Participation with	Dialogue	multicultural events
	interactions model	interactions model •	students of color model	African Americans model	best friends model	other groups model	groups model	attended model
	f Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2	r Step 1 Step 2
Classroom diversity	.085	.084 🞟 📟	.083 🖷 🖷	.083	083	.090	.085 🞟 🖷	.083 =
Informal interaction (model)	.092 🖦 🖷	- 008	.023	005	.014	.069	025	.087

Democracy outcomes: Competibility of differences

Commonality with African A	mericans				
	.	Amount of	Amount of	Dharaba at 6 Death-at-	Number of
	Personal Interactions model	Negative interaction with interactions model students of color mo	interaction with lei African Americans model	Diversity of 6 Participation with best friends model other groups model	Dislogue multicultural events groups model attended model
	7 Step 1 Step 2	r Step 1 Step 2 r Step 1 Ste		r Step 1 Step 2 r · Step 1 Step 2	r Step 1 Step 2 r Step 1 Step 2
Classroom diversity	.051	.051 .052	.052	.052 .055	.055 .057
Informal interaction (model)	.092	112 + + .214 =	.196 🐠 🖷	.106 .000	084 ,142 ■
Commonality with Asian Am	ericans				
		Amount of	Amount of	Discontinued Books to see	Number of
	Personal Interactions model	Negative interaction with interactions model students of color me	Interaction with let African Americans model	Diversity of 6 Participation with best friends model other groups model	Dialogue multicultural events groups model attended model
	r Step 1 Step 2	r Step 1 Step 2 r Step 1 Ste		r Step 1 Step 2 r Step 1 Step 2	r Step 1 Step 2 r Step 1 Step 2
Classroom diversity	.049	.049 .047	.047	.047 .046	.045 .042
Informal Interaction (model)	.162 = =	-,127 + + ,189 W	.045	.112 🕨 🗰 ,061	.005 .117 =
Commence the country to sale or					
Commonality with Latinos		Amount of	Amount of		Number of
	Personal	Negative Interaction with	interaction with	Diversity of 6 Participation with	Distogue multicultural events
	Interactions model	interactions model students of color me		best friends model other groups model	groups model attended model
	f Step 1 Step 2	r Step 1 Step 2 r Step 1 St	r Step 1 Step 2	r Step 1 Step 2 r Step 1 Step 2	r Step 1 Step 2 r Step 1 Step 2
Classroom diversity	.083	.083 .064	.084	.084 .082	.082 .084
Informal interaction (model)	.103 =	-,109 ♦ ♦ ,191 ፡፡	.100	.079 .030	089 ♦ ,119 ■
Difference is nondivisive					
		Amount of	Amount of		Number of
	Personal	Negative Interaction with	Interaction with	Diversity of 6 Participation with	Dialogue multicultural events
	interactions model	interactions model students of color m	del African Americans model	best friends model other groups model	groups model attended model
	r Step 1 Step 2	r Step 1 Step 2 r Step 1 St		r Step 1 Step 2 r Step 1 Step 2	r Step 1 Step 2 r Step 1 Step 2
Classroom diversity	.175 🖶 🖷	=	.175 W W	.175 # 179 # #	.177 = = .174 =
Informal interaction (model)	.055	-,039 .030	.112 • •	.061 = = .063 =	092 ♦ .208 ■
Democracy outcomes: Citize	nship engegement				
• · · · · · · · · · · · · · · · · · · ·					
Perspective taking					
		Amount of	Amount of		Number of
	Personal	Negative interaction with	Interaction with del African Americans model	Diversity of 6 Participation with best friends model other groups model	Dialogue multicultural events groups model attended model
	r Step 1 Step 2	r Step 1 Step 2 r Step 1 St		r Step 1 Step 2 r Step 1 Step 2	r Step 1 Step 2 r Step 1 Step 2
Classroom diversity	.186 H H		185	.185 🖷 🖷 .190 🗯 🗯	.185 🖩 🖷 .184 🖷
Informal interaction (model)	.162	096	.078	.068 .062	.015 = .144
Democracy outcomes: Racia	i/cultural engagement				
I appeared admired with an annument					
Learned about other groups	7	Amount of	Amount of		Number of
	Personal	Negative interaction with	Interaction with	Diversity of 6 Participation with	Dialogue multicultural events
	Interactions model	Interactions model students of color m	del African Americans mode	best friends model other groups model	groups model attended model
	r Step 1 Step 2		p 2 r Step 1 Step 2	r Step 1 Step 2 r Step 1 Step 2	r Step 1 Step 2 r Step 1 Step 2
Classroom diversity	.310	.313 🖷 🗯 .315 🖷	.316	.315 = .316 =	.319319 -
Informal Interaction (model)	.142 ■ ■	.019 .162	.156 40 40	.101100	154 ♦ ♦ .181 ■

Table D5

Detailed regression summary tables: MSS data base, African American students

				oositive effects; enegative effe				
Outcome variable		·			· · · · · · · · · · · · · · · · · · ·			
Learning outcomes: Active th	ninking							
Complex thinking								
	Personal Interactions model r Step 1 Step 2	Negative interactions model f Step 1 Step 2	Interaction with	Amount of interaction with White students model r Step 1 Step 2	Diversity of 6 best friends model r Step 1 Step 2	Participation with other groups model r Step 1 Step 2	Dialogue groups model r Step 1 Step 2	Number of multicultural events attended model r Step 1 Step 2
Classroom diversity informal interaction (model)	.055 .165	.055 .011	.054 .141	.054 .008	.054 020	.067 029	.054 .030	.069 .088
Social historical thinking								
Classroom diversity	Personal Interactions model r Step 1 Step 2 .349	Negative Interactions model r Step 1 Step 2 .349	interaction with students of color model r Step 1 Step 2 .353	Amount of interaction with White students model r Step 1 Step 2 .353	Diversity of 6 best friends model r Step 1 Step 2 .353	Participation with other groups model 7 Step 1 Step 2 .369	Distogue groups model r Step 1 Step 2 .353	Number of multicultural events attended model r Step 1 Step 2 .364
Informal interaction (model)	.187	.164	.138	- .026	076	.114 🖷	.095	.156
Learning outcomes: Engager	ment and motivation							
Intellectual engagement			Amount of	Amount of				Number of
	Personal interactions model r Step 1 Step 2	Negative interactions model r Step 1 Step 2	Interaction with	Interaction with White students model F Step 1 Step 2	Diversity of 6 best friends model r Step 1 Step 2	Participation with other groups model r Step 1 Step 2	Dialogue groups model r Step 1 Step 2	multicultural events attended model f Step 1 Step 2
Classroom diversity	.054	.064	.069	.069	.069	.082	.070	.096
Informal interaction (model)	.244 🗉 🖷	047	.062	.210 = =	.164	010	.012	.062
Graduate school intentions								
	Personal Interactions model	Negative Interactions model	interaction with students of color model	Amount of interaction with White students model	Diversity of 6 best friends model	Participation with other groups model	Dialogue groups model	Number of multicultural events attended model
Classroom diversity Informal interaction (model)	r Step 1 Step 2 .160	r Step 1 Step 2	r Step 1 Step 2 .172 M M .021	r Step 1 Step 2 .172 ■ ■ 107 ◆	r Step 1 Step 2 .172 ■ ■ 111 ◆	r Step 1 Step 2 .164	r Step 1 Step 2 .172 ■ ■ 075	r Step 1 Step 2 .195 ■ .136 ■

Democracy outcomes: Competibility of differences

Commonality with African Ar	mericans							
Classroom diversity	Personal interactions model r Step 1 Step 2 .184 .137	Negative interactions model r Step 1 Step 2 .184 225 +	Amount of interaction with students of color model r Step 1 Step 2 .198	Amount of interaction with White students model r Step 1 Step 2 .198 .083	Diversity of 6 best friends model r Step 1 Step 2 198 127	Participation with other groups model r Step 1 Step 2 202 8 -146	Dislogue groups model r Step 1 Step 2 .198	Number of multicultural events attended model r Step 1 Step 2 .189145
		225	-, 192	.003	. 121	-, 140	.241	-, 143
Classroom diversity	Personal Interactions model r Step 1 Step 2 .013	Negative interactions model r Step 1 Step 2 .013	Amount of Interaction with students of color model r Step 1 Step 2 .029	Amount of interaction with White students model r Step 1 Step 2 .029	Diversity of 6 best friends model r Step 1 Step 2 .029	Participation with other groups model r Step 1 Step 2 .015	Dislogue groups model r Step 1 Step 2 .029	Number of multicultural events attended model r Step 1 Step 2 .029
Informal Interaction (model)	217 🖷 🖫	070	.303 🖷 🖷	.259 🗷 🖤	.162	.239 🖷 🖷	096	.001
Classroom diversity informal interaction (model)	Personal interactions model r Step 1 Step 2 .199 006	Negative interactions model r Step 1 Step 2 .199 .034	Amount of Interaction with Students of color model 7 Step 1 Step 2 .232 8 .233 8	Amount of interaction with White students model r Step 1 Step 2 .232 8013	Diversity of 6 best friends model r Step 1 Step 2 .232 ■ ■101	Participation with other groups model r Step 1 Step 2 245 ■ 219 ■	Dislogue groups model r Step 1 Step 2 .232 = -145	Number of multicultural events attended model r Step 1 Step 2 .232
Difference la nondivisive								
Classroom diversity informal interaction (model)	Personal Interactions model f Step 1 Step 2 .127	Negative Interactions model r Step 1 Step 2 .127 dl .121 dl .121	Amount of interaction with students of color model r Step 1 Step 2 137 # 175 # 175	Amount of Interaction with White students model r Step 1 Step 2 .137	Diversity of 6 best friends model r Step 1 Step 2 137 ### ### ### ### #### ###############	Participation with other groups model r Step 1 Step 2 .135 8 8	Dialogue groups model r Step 1 Step 2 .137	Number of multicultural events attended model r Step 1 Step 2 147 = 190
Democracy outcomes: Citizel	nship engagement							
Perspective taking	, , ,							
Classroom diversity	Personal- Interactions model r Step 1 Step 2 .047 .144	Negative interactions model r Step 1 Step 2 .047 129	Amount of Interaction with students of color model r Step 1 Step 2 .079 .103	Amount of Interaction with White students model r Step 1 Step 2 .079 .131	Diversity of 6 best friends model r Step 1 Step 2 .079009	Participation with other groups model r Step 1 Step 2 .088 .019	Distogue groups model r Step 1 Step 2 .079 .265 + +	Number of multicultural events stended model r Step 1 Step 2 .088 .198 step 2
Democracy outcomes: Recial	************************************			•				
_	-,-							•
Learned about other groups	Personal interactions model	Negative Interactions model	Amount of interaction with students of color model r Step 1 Step 2	Amount of Interaction with White students model	Diversity of 6 best friends model f Step 1 Step 2	Participation with other groups model	Dialogue groups model r Step 1 Step 2	Number of multicultural events attended model
Classroom diversity Informal interaction (model)	r Step 1 Step 2 .345 W W .093 M	r Step 1 Step 2 .345 ■ ■ .014	r Step 1 Step 2 .344 W W .173 W	,344 B B	.344 B G	.349 E E	.347 W W156 +	358 s

APPENDIX E

CLASSROOM AND INFORMAL INTERACTIONAL DIVERSITY AT THE UNIVERSITY OF MICHIGAN

o provide context for the data presented in my statement of the impact of classroom and informal interactional diversity at Michigan, this appendix

presents some findings from the Michigan Student Study on how Michigan students experience these two types of diversity.

Classroom Diversity

lassroom diversity was measured by an index constructed from two questions senior in the questionnaire. In one question students were asked to indicate, on a five-point scale ranging from "not at all" to "a great deal", the extent to which they had "been exposed" in their classes to "information and activities devoted to understanding racial/ethnic groups and inter-racial ethnic relationships." In an attempt to measure the salience and impact of the diversity content that students encountered in their classes, the other question in this index asked students to indicate whether or not there had been a course at the university that had "an important impact on your views racial/ethnic of diversity multiculturalism"

The different student groups at the University of Michigan varied somewhat in their involvement with diversity in their classes, although for many students in all groups this involvement was significant.

Among students of color, African American students had the most involvement with classroom diversity. Asian Americans had the least involvement reflecting the fact that they more often majored in the natural sciences and engineering where diversity content is less relevant to the

curriculum. Among African Americans, 40% indicated extensive ("quite a bit" or "a great deal") exposure to diversity content in their courses. An equal proportion indicated that their views on diversity had been significantly influenced by some course at Michigan. About one quarter of the Asian American students indicated extensive exposure and one quarter also indicated significant impact on their views on diversity.

Among white students, about one third (35%) indicated extensive exposure to diversity in their classes, and 28% said that this had a significant impact on them.

The two questions in the classroom diversity index do not explicitly indicate whether or not exposure to content on ethnicity and race through courses was a positive or negative experience. However, student responses to an openended question that followed the question on course impact suggest that the classroom effects were viewed as predominantly positive. This question asked students who identified a course that had affected their views on diversity to indicate "in what ways it changed your views." Over 95% of the students indicated that the impact of the course was positive. A few percent wrote about being "turned off" by the course.

Pre-College and College Interactions with Diverse Students

Pre-College Experience with Diversity

tudents of different racial and ethnic groups come to Michigan with strikingly different experiences with racial and ethnic diversity. White students come from the most segregated backgrounds and hence have the most to learn from the racial/ethnic diversity they find at Michigan.

Ninety-two percent of Michigan's white students grew up in neighborhoods that were predominantly white, and 83% went to

Extent of Interracial Relationships at Michigan

ichigan students indicate a considerable degree of interracial contact in their general relationships on the Michigan campus. For white students, who come from the most segregated backgrounds, this represents a significant increase over their pre-college experiences with personal interactions across racial and ethnic lines.

In response to a question that asked seniors to rate the "interactions they have with students from various racial/ethnic groups on campus," 40% of the white students indicated having "substantial" interaction with Asian American students and another 40% indicated having "some" interaction.

Quality of Interracial Interactions

In addition to fairly extensive interracial interactions on the Michigan campus, the quality of these interactions is predominantly positive, particularly between white students and Asian Americans and Latinos. Students were asked to describe their relationships with the group they interacted most with on the Michigan campus. Latino and white students (and Asian American and white students) tend to view their relationships with each other as involving considerable cooperation and personal sharing, and very little hostility and tension. For example,

predominantly white high schools. In contrast, very few of the Latino and Asian American students had a segregated community or high school background: a little over 70% of them grew up in neighborhoods that were predominantly white, and two-thirds went to predominantly white high schools. About half of the African American students grew up in integrated or predominantly white neighborhoods, and 60% went to high schools that were integrated or predominantly white.

Twenty percent indicated "substantial" interaction and 45% "some" interaction with African American students. Despite the relatively low number of Latino students at Michigan, almost half the white students indicated at least "some" interaction with them.

The extent of interracial relationships is even greater among students of color, which is a reflection of the predominance of white students on the Michigan campus. Ninety-one percent of the Latino students, 86% of the Asian Americans, and 50% of the African American students have "substantial" interactions with white students.

approximately two-fifths (39%) of the white students said they "studied together" with Latino students "quite a bit" or "a great deal", and two thirds (68%) of the white students said that they "shared personal feelings and problems" in these relationships. Moreover, only 7% of the white students said they "had tense, somewhat hostile interactions" with Latino students "quite a bit" or "a great deal", and only 1% said they "had guarded, cautious interactions" this often.

About two-fifths (38%) of the white students said they "studied together" extensively with Asian American students, and about half (49%) said that they "shared personal feelings and problems" in these relationships. Only 1% of the white students said that these relationships involve extensive "tense, somewhat hostile interactions," and only 2% felt these interactions were extensively "guarded, cautious."

Their relationships with white students were viewed even more positively by Latino and Asian American students. Seventy-three percent of the Latino students and 67% of the Asian Americans said they "studied together" with white students "quite a bit" or "a great deal"; 85% of the Latino students and 70% of the Asian American students said they "shared personal feelings and problems" in these relationships. About 10% felt that these interactions were "tense, somewhat hostile" and "guarded, cautious."

Relationships that white students had with African American students were somewhat less

Close Friendships

n addition to questions about their general interracial interactions on Acampus, the Michigan seniors were asked to indicate the race/ethnicity of their six closest friends at Michigan. Since students were also asked to identify race/ethnicity of their six closest friends at the time they entered Michigan, we can measure the increase in the racial/ethnic diversity of the most intimate friendships. This question is particularly pertinent for African American and white students since Asian American and Latino students came to Michigan from predominantly white environments. At the time they entered Michigan, three or more of the six best friends of 87% of the Latino students were not Latino, and three or more of the six best friends of 73% of the Asian American students were not Asian American

personal than their relationships with other students of color, but very few white students felt that their interactions with African Americans were negative. Fourteen percent of the white students said that "they studied together" with African American students "quite a bit" or "a great deal"; 29% said that they "shared personal feelings and problems" in these relationships. Only 4% of the white students said that they "had tense, somewhat hostile interactions" with African American students, and only 1% said these relationships were "guarded and cautious."

From the perspective of African American students, their relationships with white students were somewhat ambivalent, reflecting negative as well as positive interactions. Twenty-six percent of the African American students said that they "studied together" extensively with white students, and 25% said that they "shared personal feelings and problems." Twenty-three percent of the African American students said that their relationships with white students were "guarded and cautious," and 15% felt that they were "tense, somewhat hostile."

While close friendship circles of African American and white students are predominantly with peers of their own backgrounds both at entrance and after four years at the University of Michigan, there is a significant increase in the racial/ethnic diversity of such friendships.

The proportion of white students who had at least one close friend of color (among their six best friends) increased from about one third (32%) at the time they entered Michigan to almost half (46%) four years later. African American students with at least one close friend who was not African American increased from slightly less than half (47%) at time of entrance to slightly more than half (54%) when they were seniors.

While one might hope that even more African American and white students would have increased their closest friendships with each other while at Michigan, the overall picture of interracial relationships at Michigan is predominantly positive.

It does not conform to the views of those in the public debate who have claimed that affirmative action has created hostile interracial environments on our college campuses.

EXPERT REPORT OF WILLIAM G. BOWEN

Gratz, et al. v. Bollinger, et al., No. 97-75321 (E.D. Mich.)

I. Statement of Qualifications:

am currently the president of the Andrew W. Mellon Foundation; I have held that position since 1988. Prior to that, I served as president of Princeton University for sixteen years, from 1972 to 1988, and as provost for five years, from 1967 to 1972. I was a Professor of Economics at Princeton University from 1965 until 1988, I had been a member of the faculty since

1958. I currently serve as a member of several corporate boards, including American Express and Merck & Co., Inc. I have written extensively about issues of higher education, including the consideration of race in admissions. A complete curriculum vitae, including a list of publications, is attached hereto as Appendix A.

II. Information Considered in Forming Opinions:

y opinions are based, in large part, on <u>The Shape of the River:</u>
<u>Long-Term Consequences of Considering Race in College and University</u>

Admissions, William G. Bowen and Derek Bok, Princeton University Press (1998). A copy of the book will be provided upon request.

III. Other expert testimony; compensation;

have not testified as an expert at trial or by deposition within the preceding four years. I am not receiving any

compensation for my work in connection with this matter.

IV. Opinions to be expressed and the basis and reasons therefor:

in our society. The obligation of a university is to the society at large over the long run, and, even more generally, to the pursuit of learning. Although this may seem amorphous, there is no escaping a university's obligation to try to serve the long-term interests of society defined in the broadest and least parochial terms, and to do so through two principal activities: advancing knowledge and educating students who will in turn serve others, within this nation and beyond it, both through their specific vocations and as citizens. Universities therefore are responsible for imparting civic and democratic values that are essential to the functioning of our nation.

Our society -- indeed, our world -- is and will continue to be multi-racial. We simply must learn to work more effectively and more sensitively

with individuals of other races, and a diverse student body can make a profound and direct contribution to the achievement of this end. In the 1960s, barely one percent of law students and two percent of medical students in America were black. At that time, few leading professional schools and nationally prominent colleges and universities enrolled more than a handful of blacks. Late in the decade, however, selective institutions set about to change these statistics, not by establishing quotas, but by considering race, along with many other factors, in assembling a diverse student body of varying talents, backgrounds, and perspectives. Schools sought to achieve diversity to cross the racial borders that separated large segments of society and to reap the educational benefits to all students of learning on a diverse campus, in which they would transcend the misperceptions and stereotypes that had been borne of racial separation.

These selective institutions recognized that a student body containing many different backgrounds, talents, and experiences would be a richer environment in which all students could better develop into productive, contributing members of our society.

Amid much passionate debate, there has been little hard evidence of how these policies work and what their consequences have been. To remedy this deficiency. Derek Bok and I examined the college experiences of more than 60,000 students -approximately 3,500 of whom were black -- who had entered 28 selective colleges and universities in the fall of 1976 and the fall of 1989;1 we also surveyed a sub-set of these students (with a survey response rate of about 80%) and thus studied the later life experiences and views of 30,000 students. This massive database, built jointly by the schools and the Andrew W. Mellon Foundation, for the first time links information such as Scholastic Assessment Test ("SAT") scores and college majors to experiences after college, including graduate and professional degrees, earnings, and involvement. Most of our study focused on African-Americans and whites, because the Latino and Native American populations at these schools were too small in 1976 to permit the same sort of statistical analysis. Nevertheless, many of the findings may be applicable to these groups as well. Our conclusions are set forth in The Shape of the

River: Long-Term Consequences of Considering Race in College and University Admissions. William G. Bowen and Derek Bok, Princeton University Press (1998). This report attempts to summarize some of our findings. My testimony in this case will draw upon the book, as well as my 40 years of experience in academia, including my tenure as provost (five years) and president (16 years) of Princeton University, and my experience as a member of several corporate boards.

As a necessary predicate, a university must have the freedom to decide which students it will admit and which criteria it will use in its admissions decisions. This academic freedom is crucial in order for a school to fulfill its mission. At bottom, admissions officers must decide which set of applicants, considered individually and collectively, will take fullest advantage of what the college has to offer, contribute most to the educational process in college, and be most successful in using what they have learned for the benefit of the larger society.

Any college or university to which admissions is highly competitive, such as the University of Michigan at Ann Arbor, has far more applicants who possess all the basic qualifications than it has places. Some candidates (a relatively small number) are so outstanding in every respect that they are obvious choices for admission by any standard. The real problems of choice arise in deciding which individuals to admit from among the large group who also have very strong qualifications, who are thought capable of doing the work and doing it well, but who are not so clearly outstanding as to be placed in the very top category.

In my experience, in deciding among this group, a school does <u>not</u> start from the premise that any applicant has a "right" to a place in a college or university. Instead, the starting premise is that a school has an obligation to make the best possible use of the limited number of places in each entering class so as to advance as effectively as possible the broad purposes the school seeks to serve. Within the very real limits imposed by the fallibility of any selection process of this kind, a school should try

The 28 colleges and universities are: Barnard College, Bryn Mawr College, Columbia University, Denison College, Duke University, Emory University, Hamilton College, Kenyon College, Miami University (Ohio), Northwestern University, Oberlin College, Pennsylvania State University, Princeton University, Rice University, Smith College, Stanford University, Swarthmore College, Tufts University, Tulane University, University of Michigan at Ann Arbor, University of North Carolina at Chapel Hill, University of Pennsylvania, Vanderbilt University, Washington University, Wellesley College, Wesleyan University, Williams College, and Yale University.

hard to be fair to every applicant; but the concept of fairness itself has to be understood within the context of the obligations of a university. Accordingly, in making these difficult choices among well-qualified candidates, considerations other than just test scores and grades come into play.

The relevance of these other considerations is based on the premise that the overall quality of the educational program is affected not only by the qualities of the individual students who are enrolled, but also by the characteristics of the entire group of students who share a common educational experience. While I believe this to be true for graduate programs too, my own experience confirms the importance for undergraduate education and, as a consequence, affects admission decisions much more significantly at that level. If there is a difference, it is only one of degree, related partly to the ages and experiences of the students, partly to the purposes of their educational programs and especially to the emphasis given to academic specialization, and partly to the respective roles of extracurricular and curricular activities.

In a residential college setting, in particular, a great deal of learning occurs informally. It occurs through interactions among students of both sexes; of different races, religions, and backgrounds; who come from cities and rural areas, from various states and countries; who have a wide variety of interests, talents, and perspectives; and who are able, directly or indirectly, to learn from their differences and to stimulate one another to reexamine even their most deeply held assumptions about themselves and their world. As a wise graduate of Princeton University observed in commenting on this aspect of the educational process, "People do not learn very much when they are surrounded only by the likes of themselves."

It follows that if, say, 2,000 individuals are to be offered places in an entering undergraduate class, the task of an admissions office is not simply to decide which applicants offer the strongest credentials as separate candidates for the college; the task, rather, is to assemble a total class of

students, all of whom will possess the basic qualifications, but who will also represent, in their totality, an interesting and diverse amalgam of individuals who will contribute through their diversity to the quality and vitality of the overall educational environment.

This concern for the composition of the undergraduate student body, as well as for the qualifications of its individual members, takes many forms. While a school is of course interested in enrolling students who are good at a great many things and not one-dimensional in any sense, it should also try to enroll students with special interests and talents in the arts and in athletics: it should seek a wide geographical representation; it should admit foreign students from a variety of countries and cultures; it should recognize the special contribution that the sons and daughters of alumni can make by representing communicating a sense of the traditions and the historical continuity of the university; it should enroll students from a range of socioeconomic backgrounds; and it should work consciously and deliberately to include minority students, who themselves represent a variety of experiences and viewpoints.

We must accept as a fact of life in contemporary America that the perspectives of individuals are often affected by their race as by other aspects of their background. If a university were unable to take into account the race of candidates, it would be much more difficult to consider carefully and conscientiously the composition of an entering class that would offer a rich educational experience to all of its members. The unplanned, casual encounters with roommates, fellow sufferers in an organic chemistry class, student workers in the library, teammates on a basketball squad, or other participants in class affairs or student government can be subtle and yet powerful sources of improved understanding and personal growth.

Indeed, the data in our study prove what I have observed for years through experience -- that diversity is valued and that "learning through

diversity" actually occurs. Our study indicates that diversity is a benefit for all students, minorities and nonminorities alike. Moreover, the data overwhelmingly demonstrate that minority students admitted to selective schools had strong academic credentials, graduated in large numbers and did very well after leaving college. By every measure of success (graduation, attainment of professional degrees, employment, earnings, civic participation, and overall satisfaction), the more selective the school, the more blacks achieved (holding constant their initial test scores and grades).

It is true that compared with their extremely high-achieving white classmates, black students in general received somewhat lower college grades and graduated at moderately lower rates. The reasons for these disparities are not fully understood, and selective institutions need to be more creative in helping improve black performance, as a few universities already have succeeded in doing. Still, 75 percent graduated within six years from the school they first entered, a figure well above the 40 percent of blacks and 59 percent of whites who graduated nationwide from the 305 universities tracked by the National Collegiate Athletic Association. Moreover, blacks did not earn degrees from these selective schools by majoring in easy They chose substantially the same subjects. concentrations as whites and were just as likely to have difficult majors, such as those in the sciences and engineering. These and other findings refute the argument that when black students are admitted to schools where many other students have stronger academic qualifications than their own -- as measured by grades and test scores -- that those students not only will drop out, but that they would have been better off attending a less selective institution.

Although over half of the black students attending these selective schools would have been rejected under a race-neutral admissions regime -- that is, if only the same proportions of black and white students had been admitted within each SAT interval -- they have done exceedingly well after college. Fifty-six percent of the black graduates who had entered these selective schools in 1976

went on to earn advanced degrees. A remarkable 40 percent received either PhDs or professional degrees in the most sought-after fields of law, business and medicine, a figure slightly higher than that for their white classmates and five times higher than that for blacks with bachelor's degrees nationwide. (As a measure of change, it is worth noting that by 1995, 7.5 percent of all law students in the United States were black, up from barely 1 percent in 1960; and 8.1 percent of medical school students were black, compared with 2.2 percent in the mid-1960s. Black elected officials now number more than 8,600.)

By the time of our survey, black male graduates who had entered selective schools in 1976 were earning an average of \$85,000 a year, 82 percent more than other black male college graduates nationwide. Their black female classmates earned 73 percent more than all black women with bachelor's degrees. Not only has the marketplace valued the work of these graduates highly, but the premium associated with attending one of these selective institutions was substantial. Overall, we found that among blacks with similar test scores, the more selective the college they attended, the more likely they were to graduate, earn advanced degrees and receive high salaries. This was generally true for whites as well.

Despite their high salaries, the blacks in our study were not just concerned with their own advancement. In virtually every type of civic activity, from social service organizations to parent associations, black men were more likely than their white classmates to hold leadership positions. Much the same pattern holds for women. These findings should reassure black intellectuals who have worried that blacks -- especially black men -- would ignore their social responsibilities once they achieved financial success.

Were black students demoralized by having to compete with whites with higher high school grades and test scores? Is it true, as Dinesh D'Souza asserts in his book "Illiberal Education," that "American universities are quite willing to sacrifice the future happiness of many young blacks and Hispanics to achieve diversity, proportional

representation, and what they consider to be multicultural progress"? The facts are very clear on this point. Far from being demoralized, blacks from the most competitive schools are the most satisfied with their college experience. More than 90 percent of both blacks and whites in our survey said they were satisfied or very satisfied with their college experience, and blacks were even more inclined than whites to credit their undergraduate experience with helping them learn crucial skills. We found no evidence that significant numbers of blacks felt stigmatized by race-sensitive policies. Only seven percent of black graduates said they would not attend the same selective college if they had to choose again.

Former students of all races reported feeling that learning to live and work effectively with members of other races is important. Large majorities also believed that their college experience contributed a lot in this respect. Consequently, almost 80 percent of the white graduates favored either retaining the current emphasis on enrolling a diverse class or emphasizing it more. Their minority classmates supported these policies even more strongly.

Some critics allege that race-sensitive admissions policies aggravate racial tensions by creating resentment among white and Asian students rejected by colleges they hoped to attend. Although we could not test this possibility definitively, we did examine the feelings of white students in our sample who had been rejected by their first-choice school. They said they supported an emphasis on diversity just as strongly as students who got into their first-choice schools.

Our findings also clarify the much misunderstood concept of merit in college admission. Many people suppose that all students with especially high grades and test scores "deserve" to be admitted and that it is unfair to reject them in favor of minority applicants with lower grades and test scores. But selective colleges do not automatically offer admission as a reward for past performance to anyone. Nor should they. For any institution, choosing fairly, "on the merits,"

means selecting applicants by criteria that are reasonably related to the purposes of the organization. For colleges and universities, this means choosing academically qualified applicants who not only give promise of doing well academically, but who also can enlarge the understanding of other students and contribute after graduation to their professions and communities. Though clearly relevant, grades and test scores are by no means all that matter.

Accordingly, an admissions policy that relied primarily on test scores would lead to the rejection of qualified minority students. The fact that, nationally, blacks are very underrepresented at the higher levels and very overrepresented at the lower levels ensures that they will have substantially lower average SAT scores even if a college were to use precisely the same SAT cut-off in admitting white and black students. For example, if a school admitted every applicant with SAT scores over 1100 and none with lower scores, the white students would still have a higher average SAT score than the black students because relatively more of them score at the upper end of the SAT distribution. This result occurs even though no racial preference was given in this hypothetical situation.

As a group, however, the black applicants are highly qualified. Of the black applicants at five of the 28 schools for which detailed admission data were available in 1989, over 90 percent scored above the national average for black test-takers on both the verbal and math SATs, considered separately. The large majority of these black applicants handily outscored not only the average black test-taker, but also the average white test-taker. Moreover, the average SAT score for black matriculants in 1989 was slightly higher than the average SAT score for all matriculants in 1951.

Talk of basing admissions mainly on test scores and grades assumes a model of admissions radically different from the one that exists today. Such a policy would mandate a fundamental change of direction for institutions that recognize the many dimensions of "qualification": the importance of a good fit between the student and the educational

program, the varied paths that individuals follow in developing their abilities, and the pitfalls of basing assessments of talent and potential solely on narrowly defined quantitative measures. Instead, as I described earlier, admissions officers have been "picking and choosing," as we believe they should always do -- admitting the candidate who seems to offer something special by way of drive and determination, the individual with a set of skills that matches well the academic requirements of the institution, someone who will bring another dimension of diversity to the student body, or a candidate who helps the institution fulfill a particular aspect of its mission.

Because other factors are important -including hard-to-quantify attributes such as
determination, motivation, creativity and character
-- many talented students, white and black, are
rejected even though they finished in the top 5
percent of their high school class. The applicants
selected are students who were also above a high
academic threshold but who seemed to have a
greater chance of enhancing the education of their
classmates and making a substantial contribution to
their professions and society. Seen from the
perspective of how well they served the missions of
these educational institutions, the students admitted
were surely "meritorious."

Could the values of diversity be achieved equally well without considering race explicitly? The Texas legislature has tried to do so by guaranteeing admission to the state's public universities for all students who finish in the top 10 percent of their high school class. Others have suggested using income rather than race to achieve diversity. The available evidence indicates that neither alternative is likely to be as effective as racesensitive admissions in enrolling an academically well prepared and diverse student body. First, the Texas approach would admit some students from weaker high schools while turning down betterprepared applicants who happen not to finish in the top tenth of their class in academically stronger schools. So long as high schools differ so substantially in the academic abilities of their students and the level of difficulty of their courses.

treating all applicants alike if they finished above a given high school class rank provides a spurious form of equality that is likely to damage the academic profile of the overall class of students admitted to selective institutions. Instead of being an effective substitute for race-sensitive admissions policies, this approach could well have the effect of diminishing the pool of students who can compete effectively for the most demanding positions of leadership in business, government, and the professions.

Second, income-based strategies are unlikely to be good substitutes for race-sensitive admissions policies because there are simply too few blacks and Latinos from poor families who have strong enough academic records to qualify for admission to highly selective institutions. Children from poor black and Hispanic families make up less than half of all poor children and are much less likely than poor whites to excel in school. For example, the data show that among all students from families with incomes under \$20,000 who also finished in the top tenth percent of their high school class, only one in six is black or Hispanic. Thus, moving from a race-sensitive admissions policy to a class-based one would substantially reduce the minority enrollments at selective institutions, and severely impair current efforts to achieve racial diversity.

What would happen if universities were flatly prohibited from considering race in admissions? Our findings suggest that over half of the black students in selective colleges today would have been rejected. Plainly, the educational benefits that students gain from learning from each other would be lost. Furthermore, we can estimate what else would be lost as a result:

Of the more than 700 black students who would have been rejected in 1976 under a race-neutral standard, more than 225 went on to earn doctorates or degrees in law, medicine or business. Approximately 70 are now doctors and roughly 60 are lawyers. Almost 125 are business executives. The average earnings of all

700 exceeds \$71,000, and well over 300 are leaders of civic organizations.

• The impact of race-neutral admissions would be especially drastic in admission to professional schools. The proportion of black students in the Top Ten law, business and medical schools would probably decline to less than I percent. These are the main professional schools from which most leading hospitals, law firms and corporations recruit. The result of race-neutral admissions, therefore, would be to damage severely the prospects for developing a larger minority presence in the corporate and professional leadership of America.

The reasons diversity has become so important at the highest levels of business, the professions, government, and society at large are readily apparent. By the year 2030, approximately 40 percent of all Americans are projected to be members of minority groups. More than \$600 billion in purchasing power is generated by minorities and more than one-third of all new entrants to the workforce are persons of color. In this environment, a diverse corporate leadership can be valuable both to understand the markets in which many companies sell and to recruit, manage, and motivate the workforce on which corporate performance ultimately depends. executive officers of major corporations have so recognized. For example, the CEO of Coca-Cola has stated that, "[a]s a company that operates in nearly 200 countries, we see diversity in the background and talent of our associates as a competitive advantage and as a commitment that is a daily responsibility." Similarly, the CEO of Chrysler has stated that "we believe that workforce diversity is a competitive advantage. Our success as a global community is as dependent on utilizing the wealth of backgrounds, skills, and opinions that a

diverse workforce offers, as it is on raw materials, technology and processes."²

My own experience as a member of several corporate boards, including American Express and Merck & Co., confirms that these statements are echoed throughout the business community. I know that the business world has not failed to recognize and appreciate the importance of diversity. Corporations are making significant efforts in recruiting and retaining a workforce that values diversity and that can effectively conduct business worldwide. There is no question that graduates of universities with diverse populations -- whether minorities or nonminorities themselves -- offer the advantage of being valuable co-workers and managers in this increasingly diverse business climate.

Race remains a significant factor in our society. Race almost always affects an individual's life experiences and perspectives, and thus a person's capacity to contribute to the kinds of learning through diversity that occur on campuses. Both the growing diversity of American society and the increasing interaction with other cultures worldwide make it evident that going to school with "the likes of oneself" will be increasingly anachronistic. The advantages of being able to understand how others think and function, to cope across racial divides, and to lead groups composed of diverse individuals are certain to increase. Moreover, our survey data throw new light on the extent of interaction occurring on campuses today and of how positively the great majority of students regard opportunities to learn from those with different points of view, backgrounds, and experiences.

M. Douglas Ivester (Chairman and CEO of The Coca-Cola Company) and Robert J. Eaton (Chairman and CEO of Chrysler Corporation), in Executive Council 1998, pp. 10, 34.

In sum, the data indicate that there is a statistically significant association between attendance at the most selective institutions and a variety of accomplishments during college and in later life. If, at the end of the day, the question is whether the most selective colleges and universities have succeeded in both enhancing the learning

experience for all students and educating sizable numbers of minority students who have already achieved considerable success and seem likely in time to occupy positions of leadership throughout society, I have no problem in answering the question -- absolutely.